

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402DATE: 07/03/97
TIME: 19:11:15

INPUT SET: S18699.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

SEQUENCE LISTING

1
2
3 (1) General Information:
4
5 (i) APPLICANT: Bradfield, Christopher A.
6 Dolwick, Kristin M.
7 Carver, Lucy A.
8
9 (ii) TITLE OF INVENTION: Ah Receptor cDNAs and Genetically
10 Engineered Cells for Detecting Agonists to the Ah Receptor
11
12 (iii) NUMBER OF SEQUENCES: 36
13
14 (iv) CORRESPONDENCE ADDRESS:
15 (A) ADDRESSEE: Tilton, Fallon, Lungmus & Chestnut
16 (B) STREET: 100 South Wacker Drive, Suite 960
17 (C) CITY: Chicago
18 (D) STATE: Illinois
19 (E) COUNTRY: USA
20 (F) ZIP: 60606-4002
21
22 (v) COMPUTER READABLE FORM:
23 (A) MEDIUM TYPE: Floppy disk
24 (B) COMPUTER: IBM PC compatible
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
27
28 (vi) CURRENT APPLICATION DATA:
29 (A) APPLICATION NUMBER: US
30 (B) FILING DATE:
31 (C) CLASSIFICATION:
32
33 (viii) ATTORNEY/AGENT INFORMATION:
34 (A) NAME: Tilton, Timothy L.
35 (B) REGISTRATION NUMBER: 16,926
36 (C) REFERENCE/DOCKET NUMBER: NU-9207-CIP
37
38 (ix) TELECOMMUNICATION INFORMATION:
39 (A) TELEPHONE: (312)-456-8000
40 (B) TELEFAX: (312)-456-7776
41
42
43 (2) INFORMATION FOR SEQ ID NO:1:
44
45 (i) SEQUENCE CHARACTERISTICS:
46 (A) LENGTH: 3207 base pairs

ENTERED

RECEIVED

OCT 16 1997

GROUP 1800

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RAW SEQUENCE LISTING PATENT APPLICATION US/08/855,402

DATE: 07/03/97
TIME: 19:11:17

INPUT SET: S18699.raw

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47      (B) TYPE: nucleic acid
48      (C) STRANDEDNESS: double
49      (D) TOPOLOGY: unknown
50
51      (ii) MOLECULE TYPE: cDNA
52
53
54      (ix) FEATURE:
55          (A) NAME/KEY: CDS
56          (B) LOCATION: 1..2415
57
58
59      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
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61      ATG AGC AGC GGC GCC AAC ATC ACC TAT GCC AGC CGC AAG CGG CGC AAG      48
62      Met Ser Ser Gly Ala Asn Ile Thr Tyr Ala Ser Arg Lys Arg Arg Lys
63          1              5              10              15
64
65      CCG GTG CAG AAA ACA GTA AAG CCC ATC CCC GCT GAA GGA ATT AAG TCA      96
66      Pro Val Gln Lys Thr Val Lys Pro Ile Pro Ala Glu Gly Ile Lys Ser
67          20              25              30
68
69      AAT CCT TCT AAG CGA CAC AGA GAC CGG CTG AAC ACA GAG TTA GAC CGC      144
70      Asn Pro Ser Lys Arg His Arg Asp Arg Leu Asn Thr Glu Leu Asp Arg
71          35              40              45
72
73      CTG GCC AGC CTG CTG CCC TTC CCG CAA GAT GTT ATT AAT AAG CTG GAC      192
74      Leu Ala Ser Leu Leu Pro Phe Pro Gln Asp Val Ile Asn Lys Leu Asp
75          50              55              60
76
77      AAA CTC TCT GTT CTT AGG CTC AGC GTC ACG TAC CTG AGG GCC AAG AGC      240
78      Lys Leu Ser Val Leu Arg Leu Ser Val Thr Tyr Leu Arg Ala Lys Ser
79          65              70              75              80
80
81      TTC TTT GAT GTT GCA TTA AAG TCC ACC CCT GCT GAC AGA AAT GGA GGC      288
82      Phe Phe Asp Val Ala Leu Lys Ser Thr Pro Ala Asp Arg Asn Gly Gly
83          85              90              95
84
85      CAG GAC CAG TGT AGA GCA CAA ATC AGA GAC TGG CAG GAT TTG CAA GAA      336
86      Gln Asp Gln Cys Arg Ala Gln Ile Arg Asp Trp Gln Asp Leu Gln Glu
87          100             105             110
88
89      GGA GAG TTC TTG TTA CAG GCG CTG AAT GGC TTT GTG CTG GTT GTC ACA      384
90      Gly Glu Phe Leu Leu Gln Ala Leu Asn Gly Phe Val Leu Val Val Thr
91          115             120             125
92
93      GCA GAT GCC TTG GTC TTC TAT GCT TCC TCC ACT ATC CAA GAT TAC CTG      432
94      Ala Asp Ala Leu Val Phe Tyr Ala Ser Ser Thr Ile Gln Asp Tyr Leu
95          130             135             140
96
97      GGC TTT CAG CAG TCT GAT GTC ATC CAT CAG AGC GTA TAT GAG CTC ATC      480
98      Gly Phe Gln Gln Ser Asp Val Ile His Gln Ser Val Tyr Glu Leu Ile
99          145             150             155             160

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100																			
101	CAT	ACA	GAA	GAC	CGG	GCG	GAA	TTC	CAG	CGC	CAG	CTT	CAC	TGG	GCT	CTA			528
102	His	Thr	Glu	Asp	Arg	Ala	Glu	Phe	Gln	Arg	Gln	Leu	His	Trp	Ala	Leu			
103					165					170					175				
104																			
105	AAC	CCA	GAC	TCT	GCA	CAA	GGA	GTG	GAC	GAA	GCC	CAT	GGC	CCT	CCA	CAG			576
106	Asn	Pro	Asp	Ser	Ala	Gln	Gly	Val	Asp	Glu	Ala	His	Gly	Pro	Pro	Gln			
107				180					185					190					
108																			
109	GCA	GCA	GTC	TAT	TAT	ACC	CCA	GAC	CAG	CTT	CCT	CCA	GAG	AAC	GCT	TCT			624
110	Ala	Ala	Val	Tyr	Tyr	Thr	Pro	Asp	Gln	Leu	Pro	Pro	Glu	Asn	Ala	Ser			
111			195					200					205						
112																			
113	TTC	ATG	GAG	AGG	TGC	TTC	AGG	TGC	CGG	CTG	AGG	TGC	CTG	CTG	GAT	AAT			672
114	Phe	Met	Glu	Arg	Cys	Phe	Arg	Cys	Arg	Leu	Arg	Cys	Leu	Leu	Asp	Asn			
115		210					215					220							
116																			
117	TCA	TCT	GGT	TTT	CTG	GCA	ATG	AAT	TTC	CAA	GGG	AGG	TTA	AAG	TAT	CTT			720
118	Ser	Ser	Gly	Phe	Leu	Ala	Met	Asn	Phe	Gln	Gly	Arg	Leu	Lys	Tyr	Leu			
119	225					230					235					240			
120																			
121	CAT	GGA	CAG	AAC	AAG	AAA	GGG	AAG	GAC	GGA	GCG	CTG	CTT	CCT	CCA	CAA			768
122	His	Gly	Gln	Asn	Lys	Lys	Gly	Lys	Asp	Gly	Ala	Leu	Leu	Pro	Pro	Gln			
123					245				250						255				
124																			
125	CTG	GCT	TTG	TTT	GCA	ATA	GCT	ACT	CCA	CTT	CAG	CCA	CCC	TCC	ATC	CTG			816
126	Leu	Ala	Leu	Phe	Ala	Ile	Ala	Thr	Pro	Leu	Gln	Pro	Pro	Ser	Ile	Leu			
127				260					265					270					
128																			
129	GAA	ATT	CGA	ACC	AAA	AAC	TTC	ATC	TTC	AGG	ACC	AAA	CAC	AAG	CTA	GAC			864
130	Glu	Ile	Arg	Thr	Lys	Asn	Phe	Ile	Phe	Arg	Thr	Lys	His	Lys	Leu	Asp			
131			275					280					285						
132																			
133	TTC	ACA	CCT	ATT	GGT	TGT	GAT	GCC	AAA	GGG	CAG	CTT	ATT	CTG	GGC	TAT			912
134	Phe	Thr	Pro	Ile	Gly	Cys	Asp	Ala	Lys	Gly	Gln	Leu	Ile	Leu	Gly	Tyr			
135		290					295					300							
136																			
137	ACA	GAA	GTA																

RAW SEQUENCE LISTING PATENT APPLICATION US/08/855,402

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TIME: 19:11:22

INPUT SET: S18699.raw

153	AGA CCA GAT TAC ATC ATC GCC ACT CAG AGA CCA CTG ACG GAT GAA GAA	1152
154	Arg Pro Asp Tyr Ile Ile Ala Thr Gln Arg Pro Leu Thr Asp Glu Glu	
155	370 375 380	
156		
157	GGA CGA GAG CAT TTA CAG AAG CGA AGT ACG TCG CTG CCC TTC ATG TTT	1200
158	Gly Arg Glu His Leu Gln Lys Arg Ser Thr Ser Leu Pro Phe Met Phe	
159	385 390 395 400	
160		
161	GCT ACC GGA GAG GCT GTG TTG TAC GAG ATC TCC AGC CCT TTC TCT CCC	1248
162	Ala Thr Gly Glu Ala Val Leu Tyr Glu Ile Ser Ser Pro Phe Ser Pro	
163	405 410 415	
164		
165	ATA ATG GAT CCC CTA CCA ATA CGC ACC AAA AGC AAC ACT AGC AGG AAA	1296
166	Ile Met Asp Pro Leu Pro Ile Arg Thr Lys Ser Asn Thr Ser Arg Lys	
167	420 425 430	
168		
169	GAC TGG GCT CCC CAG TCA ACC CCA AGT AAG GAT TCT TTC CAC CCC AGT	1344
170	Asp Trp Ala Pro Gln Ser Thr Pro Ser Lys Asp Ser Phe His Pro Ser	
171	435 440 445	
172		
173	TCT CTT ATG AGT GCC CTC ATC CAG CAG GAT GAG TCC ATC TAT CTG TGT	1392
174	Ser Leu Met Ser Ala Leu Ile Gln Gln Asp Glu Ser Ile Tyr Leu Cys	
175	450 455 460	
176		
177	CCT CCT TCA AGC CCT GCG CTG TTA GAC AGC CAT TTT CTC ATG GGC TCC	1440
178	Pro Pro Ser Ser Pro Ala Leu Leu Asp Ser His Phe Leu Met Gly Ser	
179	465 470 475 480	
180		
181	GTG AGC AAG TGC GGG AGT TGG CAA GAC AGC TTT GCG GCC GCA GGA AGT	1488
182	Val Ser Lys Cys Gly Ser Trp Gln Asp Ser Phe Ala Ala Ala Gly Ser	
183	485 490 495	
184		
185	GAG GCT GCG CTG AAA CAT GAG CAA ATT GGC CAT GCT CAG GAC GTG AAC	1536
186	Glu Ala Ala Leu Lys His Glu Gln Ile Gly His Ala Gln Asp Val Asn	
187	500 505 510	
188		
189	CTT GCA CTC TCT GGC GGC CCC TCA GAG CTC TTT CCG GAT AAT AAA AAT	1584
190	Leu Ala Leu Ser Gly Gly Pro Ser Glu Leu Phe Pro Asp Asn Lys Asn	
191	515 520 525	
192		
193	AAT GAC TTG TAC AGC ATC ATG AGG AAC CTT GGG ATT GAT TTT GAA GAT	1632
194	Asn Asp Leu Tyr Ser Ile Met Arg Asn Leu Gly Ile Asp Phe Glu Asp	
195	530 535 540	
196		
197	ATC AGA AGC ATG CAG AAC GAG GAG TTC TTC AGA ACT GAC TCC ACC GCT	1680
198	Ile Arg Ser Met Gln Asn Glu Glu Phe Phe Arg Thr Asp Ser Thr Ala	
199	545 550 555 560	
200		
201	GCT GGT GAG GTT GAC TTC AAA GAC ATC GAC ATA ACG GAC GAA ATC CTG	1728
202	Ala Gly Glu Val Asp Phe Lys Asp Ile Asp Ile Thr Asp Glu Ile Leu	
203	565 570 575	
204		
205	ACC TAC GTG CAG GAT TCC CTG AAC AAT TCA ACT TTG CTG AAC TCG GCT	1776

RAW SEQUENCE LISTING PATENT APPLICATION US/08/855,402

DATE: 07/03/97
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INPUT SET: S18699.raw

206	Thr	Tyr	Val	Gln	Asp	Ser	Leu	Asn	Asn	Ser	Thr	Leu	Leu	Asn	Ser	Ala	
207				580					585					590			
208																	
209	TGC	CAG	CAG	CAG	CCT	GTG	ACT	CAG	CAC	CTA	AGC	TGT	ATG	CTG	CAG	GAG	1824
210	Cys	Gln	Gln	Gln	Pro	Val	Thr	Gln	His	Leu	Ser	Cys	Met	Leu	Gln	Glu	
211			595					600					605				
212																	
213	CGC	CTG	CAA	CTA	GAG	CAA	CAG	CAA	CAG	CTT	CAG	CAG	CCC	CCG	CCG	CAG	1872
214	Arg	Leu	Gln	Leu	Glu	Gln	Gln	Gln	Gln	Leu	Gln	Gln	Pro	Pro	Pro	Gln	
215		610					615					620					
216																	
217	GCT	CTG	GAG	CCC	CAG	CAG	CAG	CTG	TGT	CAG	ATG	GTG	TGC	CCC	CAG	CAA	1920
218	Ala	Leu	Glu	Pro	Gln	Gln	Gln	Leu	Cys	Gln	Met	Val	Cys	Pro	Gln	Gln	
219	625					630				635						640	
220																	
221	GAT	CTG	GGT	CCG	AAG	CAC	ACG	CAA	ATC	AAC	GGC	ACG	TTT	GCA	AGT	TGG	1968
222	Asp	Leu	Gly	Pro	Lys	His	Thr	Gln	Ile	Asn	Gly	Thr	Phe	Ala	Ser	Trp	
223					645					650					655		
224																	
225	AAC	CCC	ACC	CCT	CCC	GTG	TCT	TTC	AAC	TGT	CCC	CAG	CAG	GAA	CTA	AAG	2016
226	Asn	Pro	Thr	Pro	Pro	Val	Ser	Phe	Asn	Cys	Pro	Gln	Gln	Glu	Leu	Lys	
227				660					665					670			
228																	
229	CAC	TAT	CAG	CTC	TTT	TCC	AGC	TTA	CAG	GGG	ACT	GCT	CAG	GAA	TTT	CCC	2064
230	His	Tyr	Gln	Leu	Phe	Ser	Ser	Leu	Gln	Gly	Thr	Ala	Gln	Glu	Phe	Pro	
231			675					680					685				
232																	
233	TAC	AAA	CCA	GAG	GTG	GAC	AGT	GTG	CCT	TAC	ACA	CAG	AAC	TTT	GCT	CCC	2112
234	Tyr	Lys	Pro	Glu	Val	Asp	Ser	Val	Pro	Tyr	Thr	Gln	Asn	Phe	Ala	Pro	
235		690					695					700					
236																	
237	TGT	AAT	CAG	CCT	CTG	CTT	CCA	GAA	CAT	TCC	AAG	AGT	GTG	CAG	TTG	GAC	2160
238	Cys	Asn	Gln	Pro	Leu	Pro	Glu	His	Ser	Lys	Ser	Val	Gln	Leu	Asp		
239	705					710				715					720		
240																	
241	TTC	CCT	GGA	AGG	GAT	TTT	GAA	CCG	TCC	CTG	CAT	CCC	ACT	ACT	TCT	AAT	2208
242	Phe	Pro	Gly	Arg	Asp	Phe	Glu	Pro	Ser	Leu	His	Pro	Thr	Thr	Ser	Asn	
243				725						730					735		
244																	
245	TTA	GAT	TTT	GTC	AGT	TGT	TTA	CAA	GTT	CCT	GAA	AAC	CAA	AGT	CAT	GGG	2256
246	Leu	Asp	Phe	Val	Ser	Cys	Leu	Gln	Val	Pro	Glu	Asn	Gln	Ser	His	Gly	
247				740					745					750			
248																	
249	ATA	AAC	TCA	CAG	TCC	GCC	ATG	GTC	AGT	CCT	CAG	GCA	TAC	TAT	GCT	GGG	2304
250	Ile	Asn	Ser	Gln	Ser	Ala	Met	Val	Ser	Pro	Gln	Ala	Tyr	Tyr	Ala	Gly	
251			755					760					765				
252																	
253	GCC	ATG	TCC	ATG	TAT	CAG	TGC	CAG	CCA	GGG	CCA	CAG	CGC	ACC	CCT	GTG	2352
254	Ala	Met	Ser	Met	Tyr	Gln	Cys	Gln	Pro	Gly	Pro	Gln	Arg	Thr	Pro	Val	
255		770					775					780					
256																	
257	GAC	CAG	ACG	CAG	TAC	AGC	TCT	GAA	ATT	CCA	GGT	TCT	CAG	GCA	TTC	CTA	2400
258	Asp	Gln	Thr	Gln	Tyr	Ser	Ser	Glu	Ile	Pro	Gly	Ser	Gln	Ala	Phe	Leu	

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/08/855,402

DATE: 07/03/97
TIME: 19:11:27

INPUT SET: S18699.raw

Line	Error	Original Text
29	Wrong application Serial Number	(A) APPLICATION NUMBER: US

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402DATE: 06/30/97
TIME: 14:18:30

INPUT SET: S18699.raw

This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

Does Not Comply
Corrected Diskette Needed

SEQUENCE LISTING

1
2
3 (1) General Information:
4
5 (i) APPLICANT: Bradfield, Christopher A.
6 Dolwick, Kristin M.
7 Carver, Lucy A.
8
9 (ii) TITLE OF INVENTION: Ah Receptor cDNAs and Genetically
10 Engineered Cells for Detecting Agonists to the Ah Receptor
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12 (iii) NUMBER OF SEQUENCES: 36
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14 (iv) CORRESPONDENCE ADDRESS:
15 (A) ADDRESSEE: Tilton, Fallon, Lungmus & Chestnut
16 (B) STREET: 100 South Wacker Drive, Suite 960
17 (C) CITY: Chicago
18 (D) STATE: Illinois
19 (E) COUNTRY: USA
20 (F) ZIP: 60606-4002
21
22 (v) COMPUTER READABLE FORM:
23 (A) MEDIUM TYPE: Floppy disk
24 (B) COMPUTER: IBM PC compatible
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
27
28 (vi) CURRENT APPLICATION DATA:
29 (A) APPLICATION NUMBER: US
30 (B) FILING DATE:
31 (C) CLASSIFICATION:
32
33 (viii) ATTORNEY/AGENT INFORMATION:
34 (A) NAME: Tilton, Timothy L.
35 (B) REGISTRATION NUMBER: 16,926
36 (C) REFERENCE/DOCKET NUMBER: NU-9207-CIP
37
38 (ix) TELECOMMUNICATION INFORMATION:
39 (A) TELEPHONE: (312)-456-8000
40 (B) TELEFAX: (312)-456-7776
41
42

ERRORED SEQUENCES FOLLOW:

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402DATE: 06/30/97
TIME: 14:18:32

INPUT SET: S18699.raw

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3207 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(ix) FEATURE:

- (A) NAME/KEY: CDS
(B) LOCATION: 1..2415

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

43 (2) INFORMATION FOR SEQ ID NO:1:
44
45 (i) SEQUENCE CHARACTERISTICS:
--> 46 (A) LENGTH: 3207 base pairs
47 (B) TYPE: nucleic acid
48 (C) STRANDEDNESS: double
49 (D) TOPOLOGY: unknown
50
51 (ii) MOLECULE TYPE: cDNA
52
53
54 (ix) FEATURE:
55 (A) NAME/KEY: CDS
56 (B) LOCATION: 1..2415
57
58
59 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
60
61 ATG AGC AGC GGC GCC AAC ATC ACC TAT GCC AGC CGC AAG CGG CGC
--> 62 AAG 48
63 Met Ser Ser Gly Ala Asn Ile Thr Tyr Ala Ser Arg Lys Arg Arg Lys
64 1 5 10 15
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66 CCG GTG CAG AAA ACA GTA AAG CCC ATC CCC GCT GAA GGA ATT AAG
--> 67 TCA 96
68 Pro Val Gln Lys Thr Val Lys Pro Ile Pro Ala Glu Gly Ile Lys Ser
69 20 25 30
70
71 AAT CCT TCT AAG CGA CAC AGA GAC CGG CTG AAC ACA GAG TTA GAC
--> 72 CGC 144
73 Asn Pro Ser Lys Arg His Arg Asp Arg Leu Asn Thr Glu Leu Asp Arg
74 35 40 45
75
76 CTG GCC AGC CTG CTG CCC TTC CCG CAA GAT GTT ATT AAT AAG CTG GAC
77 192
78 Leu Ala Ser Leu Leu Pro Phe Pro Gln Asp Val Ile Asn Lys Leu Asp
79 50 55 60
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81 AAA CTC TCT GTT CTT AGG CTC AGC GTC ACG TAC CTG AGG GCC AAG AGC
82 240
83 Lys Leu Ser Val Leu Arg Leu Ser Val Thr Tyr Leu Arg Ala Lys Ser
84 65 70 75 80
85
86 TTC TTT GAT GTT GCA TTA AAG TCC ACC CCT GCT GAC AGA AAT GGA GGC
87 288
88 Phe Phe Asp Val Ala Leu Lys Ser Thr Pro Ala Asp Arg Asn Gly Gly
89 85 90 95
90
91 CAG GAC CAG TGT AGA GCA CAA ATC AGA GAC TGG CAG GAT TTG CAA
--> 92 GAA 336
93 Gln Asp Gln Cys Arg Ala Gln Ile Arg Asp Trp Gln Asp Leu Gln Glu
94 100 105 110
95

(appearing throughout)

sample offormat may

48

96

↓ etc